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ABSTRACT

This volume outlines the requirements and content of a second-year course in allied health occupations education that is designed to provide students with a practical understanding of the work done by dentists, dental hygienists, dental laboratory technicians, and dental assistants and also to help students acquire some basic dental assistant skills. Addressed in the individual units of the course are the following topics: the nature and scope of the job of the dental assistant, dental anatomy and physiology, dental histology, odontography, dental equipment and care, and laboratory techniques. The first part of the volume sets forth standards pertaining to the primary objective of the course; its content; its target audience, duration, and prerequisites; and course requirements. The bulk of the guide comprises a series of unit outlines in which behavioral objectives are presented together with an implementation plan. Concluding the volume are a list of student lesson assignments, a sample training site plan, and a sample student evaluation checklist. (MN)

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Middletown Public Schools

CURRICULUM STANDARDS

ALLIED HEALTH OCCUPATIONS II
DENTAL ASSISTANT COMPONENT
STUDENT LEARNING GUIDE

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
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COURSE DESCRIPTION

COURSE TITLE : Allied Health Occupations II (Dental Assistant)

OBJECTIVE : To provide the student with a practical study of the work done by dentists, dental hygienists, dental laboratory technicians, and dental assistants and to acquire some basic dental assistant skills.

DESIGNED FOR : A 12th grade student who wishes to examine possibilities of employment or further education in the dental field.

CONTENT : Topics covered include:

1. Introduction to Dental Assisting
2. Dental Anatomy and Physiology
3. Dental Histology
4. Odontography
5. Dental Equipment/Care
6. Laboratory Techniques

DURATION : Two semesters.

PREREQUISITES: Allied Health I.

COURSE REQUIREMENTS :

1. Student will bring required materials to class.
2. Homework assignments, quizzes, tests, examinations.
3. Students must wear uniform provided by the school for their clinical experiences.

NOTE: The student will receive 1/2 credit for the first semester of Allied Health II. One full credit will be awarded for the second semester which includes approximately 60 hours of clinical experience in a dentist's office and/or dental clinic.

DENTAL ASSISTANT

LEARNING PACKET - GUIDE

The dental assistant works with the dentist in examining and treating patients. The assistant obtains the patient's records, prepares the patient for treatment, and hands the dentist or lays out the instruments and materials needed. The assistant may also keep the patient's mouth clear by using suction devices. In addition, preparing materials for making impressions, processing dental X-rays, and preparing instruments for sterilization are some of the other duties of the dental assistant. The assistant may also manage the office by making appointments, keeping records, and sending out bills.

This learning packet is to be used with:

Text: Anderson, Pauline C. and Burkard, Martha R.; The Dental Assistant; Delmar.

Film Strips:

Models:

Evaluation: Observation of Laboratory techniques by instructor and/or clinical area supervisors.
Unit Tests.
Mid-term and final examinations.

This course will provide approximately 50 classes of Allied Health Occupations II, Core Curriculum before beginning study on dental assistant, 15 classes of instructions on introduction to dental assistant (first semester), and approximately 60 hours of clinical experience in a dental office, plus approximately 30 classes in the classroom during the second semester.

CURRICULUM STANDARDS	IMPLEMENTATION PLAN
I. INTRODUCTION TO DENTAL ASSISTING	
A. The Role of the Dental Assistant	
The student will:	
1. identify the members of the dental health team. 2. list various tasks that may be performed by the auxiliary personnel	Text: Anderson, Pauline C. & Burkhard, Martha R. The Dental Assistant
B. The Dental Office Routine	
The student will:	
1. determine the career options within the dental office for the assistant 2. develop communication skills and problem solving techniques. a. patient reception techniques b. telephone procedures c. appointment control d. records, communications e. recall systems f. inventory of supplies	
II. CHAIRSIDE TECHNIQUES	
A. Seating the Dental Patient	
The student will:	
1. state the procedure a dental assistant should follow when receiving a patient 2. list instruments which comprise the Basic Setup; mouth mirrors, explorer, cotton pliers	
B. How to Pass and Receive Instruments	
The student will demonstrate passing and receiving instruments using basic hand and wrist motions; pen grasp, modified pen grasp, palm grasp	View Film

CURRICULUM STANDARDS	IMPLEMENTATION PLAN
III. DENTAL EQUIPMENT & CARE	
A. A Program of Safety	Text: Anderson & Burkard The Dental Assistant Delmar
The student will:	
1. list responsibilities of dental assistant for general safety measures in all areas of dental practice.	
a. wiring, cords, heating devices, electric and motorized equipment, bunsen burners	Test: pg. 156-158
b. chemical scales, vibrators, lathes, trimmers	
c. hands--no lotion, short nails, use of pointed instruments, protective eyeglasses, jewelry	
2. complete the safety review test with 100% accuracy	
B. Review of Handwashing	
The student will practice handwashing	Unit Safety Test
C. Sterilization, Disinfection, Sanitation	
The student will:	
1. describe necessary precautions needed to provide protection against cross-infections in the dental office.	
2. define: sterilization, asepsis, disinfection	
3. state dental disinfecting rule	
4. state two rules for using germecides	
5. state three necessary factors for destruction of bacteria by heat	
6. describe two methods for cleaning instruments. handscrubbing, ultrasonic	
7. describe two methods of sterilizing. autoclane, boiling (distilled H_2O), hot oil, hot bead.	
IV. DENTAL ANATOMY AND PHYSIOLOGY	
A. The Skull	
1. identify and name the bones of the skull	
2. locate various landmarks of the skull which are directly associated with dental procedures.	

B. The Face

The student will identify the bones of the face using a model/picture.

C. The Mandible

The student will:

1. identify the anatomy of the mandible.
2. define terms associated with the mandible.

D. Muscles of Mastication

The student will identify and state the functions of:

1. the temporal muscle
2. the masseter muscle
3. the pterygoids

E. Paranasal Sinuses

The student will:

1. locate the air cavities in the skull.
2. discuss their shape, size and function.
   a. frontal
   b. ethmoid
   c. sphenoid
   d. maxillary

F. The Oral Cavity (Hard Palate)

The student will:

1. identify the bones and atomic landmarks of the hard palate.
2. identify and locate the palatine foramen of the hard palate.

G. The Oral Cavity (Mouth)

The student will:

1. identify all structures of the mouth, including inner and outer anatomical parts.
2. describe the principal functions of the tongue.

H. Salivary Glands

The student will:

1. identify and determine the location and size of major salivary glands.
2. describe functions of the salivary glands.

I. Cranial Nerves

The student will:

1. identify the divisions of the trigeminal nerve and their location.
2. relate the nerve supply of the maxellary division to soft tissues of the oral cavity and teeth located on the maxellary.
3. relate the nerve supply of the mandibular division to soft tissues of the oral cavity and teeth located on the 5th wall.

J. Blood Supply of the Head and Neck

The student will determine the major blood supply to the structures of the face, mouth, and neck.

CURRICULUM STANDARDS

V. DENTAL HISTOLOGY

A. Development of the Face and Nose

The student will :

1. distinguish epithelial cells from connective tissue cells with respect to their structure and function.
2. discuss the chronological stages of development of the face and their associated structures.

B. Development of the Tongue and Palate

The student will:

1. describe the developmental stages of the tongue and palate.
2. discuss the reasons for the occurrence(s) of an anomaly.

C. Early Development of the Teeth

The student will:

1. describe the early (embryonic) development of tooth tissues and the beginning formation of tooth buds.
2. define:

a. ectoderm	e. labiodental
b. mesenchyme	f. differenciation
c. deciduous	g. histodifferentiation
d. laminae	h. marphodifferenciation

D. Development of the Tooth Buds

The student will describe the stages of development of the tooth buds, including the formation of dentin, enamel, and root(s).

IMPLEMENTATION PLAN

Text: Anderson, Pauline C. and Burkard, Martha R.
The Dental Assistant
Delmar

Reproduce drawing for labeling
#1, 11, and 12

CURRICULUM STANDARDS

IMPLEMENTATION PLAN

E. Composition and Formation of the Teeth

The student will:

1. review the anotomical parts of a typical tooth.
2. determine the functions of each tissue.

F. Tissues Surrounding the Teeth

The student will:

1. list the tissues that surround and support the teeth.
2. discuss the relationships of the teeth, mandible and the maxilla.
3. define:

   a. gingival recession
   b. percodontal pocket

G. Eruption of the Teeth

The student will:

1. assess the events that occur prior to or that accompany tooth eruption.
2. list the usual sequence of eruption for deciduous and permanent teeth.

H. Resorption of the Deciduous Roots

The student will describe the process of root resorption and the specialized cells involved.

Text: Anderson & Burkard
The Dental Assistant
Delmar

Unit III Test

CURRICULUM STANDARDS

VI. ODONTOGRAPHY

A. External Feature of the Teeth

The student will:

1. define:
   a. odontography
   b. nomenclature
   c. cusp
   d. cingulum
   e. mamelon
   f. ridge
2. identify the divisional thirds, angles, and other landmarks of importance.

B. Descriptions of Individual Teeth

The student will:

1. describe individual variations in size, shape, and other characteristics of teeth as well as their basic design of function.
2. compare cusps, roots, and the occlusal aspects of anterior and posterior teeth.
3. identify landmarks of individual teeth.
4. list prominent characteristics of each permanent tooth.

C. Radiology

The student will:

1. define: Dental Radiology.
2. identify discoverer of X-rays.
3. discuss the physical properties of X-radiation and its relationship to other forms of radiation found in the universe.
4. list hazards of radiation and its effect on living tissue.
5. demonstrate proper safety measures for protection of the patient and operator.

IMPLEMENTATION PLAN

Test: Anderson & Burkard
The Dental Assistant
Delmar

Draw, label small poster.
Show variations in size and shape of individual teeth.

CURRICULUM STANDARDS	IMPLEMENTATION PLAN
D. Use and Care of the Motor Dental Chair The student will: 1. discuss the importance of a daily routine in the care and maintainance of dental equipment. 2. identify the type, function, and care of the motor dental chair.	Read: 170-173 View Film: Film review sheet.
E. Cutting Instruments The student will: 1. explain the parts of the cutting instruments. 2. list the uses for the various cutting instruments. 3. explain the care and maintainance of the cutting instruments. 4. explain the significance of the numbers on cutting instruments.	Handle and identify cutting instruments.
F. Dental Burs The student will: 1. define bur. 2. name two uses of burs. 3. explain the parts of a bur. 4. list types of cutting burs. 5. list types of finishing burs. 6. state reason for preferance of carbide burs over steel burs. 7. explain sterilizaiton process for cutting burs.	

G. Surgical Instruments

The student will:

1. list four surgical instruments needed for all "simple' extractions
2. list three reasons for tooth extractions
3. explain the importance of giving preoperational instructions to patients who are to have oral surgery

H. Sharpening Dental Instruments

The student will:

1. explain the care necessary in sharpening dental cutting instruments
2. state the care of the Arkansas Stone

Write: 1/2 page - How you would reduce anxiety of a patient having an extraction.

Allied Health II
Dental Assistant

Assignments

Text: Anderson, Pauliine C. and Burkard, Martha R., The Dental Assistant, Delmar

Date due

1. Text: Read pg. 1-15
2. " Read - 191 and 192
   Questions: pg. 193; 1-4
3. " Read: 202-204
4. " Read: 152-155
5. " Read 161-169
   Questions: #1-4
6. Read: pg. 16-19
   Do review - pg. 19-21
7. Text: Read: 22-23
   Do review: pg 23 & 24
8. " Read: pg. 25 & 26
   Do review: pg. 27-29
9. " Read: pg. 30 -34
   Do review: pg. 34 - 37
10. " Read: pg. 39 - 41
    Do review: pg. 41 & 42
11. " Read: pg. 43 & 44
    Do review: pg. 44
12. " Read: 45- 47
    Do review: pg. 48 & 49
13. " Read: pg. 50 - 52
    Do review: pg. 52 & 53
14. " Read: 54 - 58
    Review: pg. 58 - 62, # 1 -24

Date due

15. Read: 63-66
    Review: 66-68
16. Read: pg. 69-71
    Do review: pg. 71 & 72
17. Read: 73 & 74
    Questions: pg. 74 -76
18. Read: 77 & 78
    Review 78; # 1-10
19. Read: 79-83
    Questions: 83-86
    Reproduce drawing: Label
    # 1, 11 and 12
20. Read: pg. 87-92
    Do review: pg. 93-96
21. Read: 97-101
    Review: pg. 102-103; #2-16
22. Read: 104-107
    Review: 107 & 108
23. Read: pg. 110-115
    Review: pg. 116 & 117
24. Read: 118-128
    Draw, label small poster
    Show variations in size and ahape of individual teeth
    Review questions: pg. 128-130
25. Read: pg. 131-140
    Review questions: pg. 149 & 150, #1, 2, 3, 7, 9, 10, 11

26. Text: Read: 170-173
    Film Review Sheet

27. Text: Read: 174-178
    Review questions: #1, a-e

28. Text: Read: 179-182
    Do review questions: pg. 182; # 1-6

29. Text: Read: pg. 183-188
    Write: ½ page - How you would reduce anxiety
    of a patient having an extraction

30. Text: Read: 189-190
    Review questions: pg. 190. # 1 & 2

TRAINING - SITE PLANS

What they are and how to use them.

Training plans are methods by which the instructor correlates the classroom and clinical experiences. The time required for a student to become competent in each task may vary, but average times should be provided for each task.

A time sheet must be completed by the student at the end of each day. Each student must record the skills learned/utilized and the time spent on each skill. This sheet is to be kept at the student's training site and, when completed, turned in to the instructor.

The on-site training plan should be completed by the on-site trainer or instructor and must be kept at the training site. When a student has successfully completed each competency, the on-site trainer will sign the student off, verifying their performance. The student will be responsible for making sure that they have completed each task and that they have the on-site trainer's signature. A copy of the completed training plans will be given to the student at the end of the program as a reference and guide.

TRAINING PLAN

Student _____ Date _____

Course Title _____

Training Job Title _____

Training Site	School
Facility/Office _____	Name _____
Address _____	Administrator _____
_____	Phone _____
Phone _____	Parent's Name _____
Contact Person _____	Emer.Phone No. _____
Title _____	Teacher's Name _____
Phone _____	Phone _____

Student's Training site hours from _____ AM/PM to _____ AM/PM

Department/Unit/Ward _____

Sub-department _____

The tasks listed are those which the student is expected to be able to perform to the satisfaction of the on-site trainer/staff.

_____ _____
On-site Trainer Student

_____ _____
Instructor Date

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Student: _____

Comments:

The above signatures certify that _____

has successfully performed the skills listed under the direct supervision of the designated on-site trainer and/or the instructor of record.

Date of completion of entire training plan: _____

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DENTAL ASSISTANT

Middletown High School
Allied Health Occupations Program

Student _____

Tasks	Training Time Spent	Date Competency Level Achieved	On-site Trainer Signature
Receptionist Duties: Greets patient Explains medical history form			
Filing Puls folders from file			
Answer telephone Schedule appointments:			
Recall system: Mail cards Telephone			
typing: New patient information Insurance forms			
Set up unit: Set out instruments for scheduled procedure			
Seat patient: Communication for relaxation Special help for handicapped patients			
Assisting the doctor: Handling instruments two handed four handed Suctioning			

Student

Tasks	Training Time Spent	Date Competency Level Achieved	On-site Trainer Signature
Mixing materials: amalgan cements			
Impression materials: alginate			
RADIOLOGY: Clean tanks/automatic developer change X-ray solutions			
Develop X-ray films Mount films			

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DENTAL ASSISTANT

Student _____

Tasks	Training Time Spent	Date Competency Level Achievement	On-site Trainer Signature
UNIT CARE: Wipe down unit using a disinfectant solution			
chair bracket table hoses			
Clean cuspidors clean suction unit			
Wash instruments Sterilize in autoclave Replace sterilized instruments to storage area			
Stock supplies Clean autoclave			